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<110> BESEME, Frederic

BLOND, Jean-Luc

BOUTON, Olivier

MANDRAND, Bernard

MALLET, Francois

PERRON, Herve

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<141> 1999-12-16

<150> PCT/FR98/01442

<151> 1998-07-06

<150> FR 97/08815

<151> 1997-07-07

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<170> PatentIn version 3.1

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<223> PCR primer or probe

<400> 18

accatttgac cctcagacac t

21

<210> 19

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 19

aaccctttgc cactacatca attt

24

<210> 20

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 20

tcagggatag ccccatcta t

21

<210> 21

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 21

ttgtctcctg gattttcagg tt

22

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 22

ggaccctacc cagtcatttt

20

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer or probe

<400> 23
atcaggagca cagcggacac

20

<210> 24

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 24
ggacatccaa agtgatacat cc

22

<210> 25

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 25
aatgtatggc ctgaagtgca g

21

<210> 26

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 26
cttcccagga tgtatcactt tg

22

<210> 27
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 27
cactgcagaa gaatataagt cggt

24

<210> 28

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe or primer

<400> 28
gcttccaaga tgggtggcaag c

21

<210> 29

<211> 678

<212> DNA

<213> Artificial Sequence

<220>

<223> Ppol-MSRV probe

<220>

<221> misc_feature

<222> (594)..(594)

<223> n = any nucleotide

<400> 29
tcagggatag ccccatcta tttggccagg cattagccca agacttgagc cagttctcat 60
acctggatat tcttgtcctt tggtagcggt atgatttact tttagccgcc cggttcagaaa 120
ccttgtgcca tcaagccacc caagtgtctt taaatttcct cgccacctgt ggctacaagg 180
tttccaaacc aaaggctcag ctctgtcac agcagaaggc tatttaccct aaatacttag 240
ggctgaaatt atccaaaggc accagggccc tcagttagga atgtatccag cctatactgg 300
cttatcctta tcccaaaacc ctaaaacaac taagaagggt ccttggcata ataggcataa 360
caggcataac aggtttctgc tgaatatgga ttcccaagta cggcaaaata gccagaccat 420
tatatacact aattaaggaa actcagaaag ccaataccca tttagtaaga tggacacctg 480
aagcagaggc agctttccag gccgtaaaga acaccctaac ccaagcccca gtgttaagct 540
tgccagcggg gcaagacttt tctttctgtg tcacagaaaa aataggaata gctntaggag 600
tccttacaca ggtccgaggg accagcttgc aacccatggc atacctgagt aaggaaattg 660
atgtagtggc aaagggtt 678

<210> 30

<211> 536

<212> DNA

<213> Artificial Sequence

<220>

<223> Pgag-LB19 probe

<400> 30
ccaatctcca tgttgtatcc ccttcccaa ctaataagga cccccccttc aaccxaaaca 60
gtccaaaagg acatagacaa aggagtaaac aatgaaccaa agagtgcaca tattccctgg 120
ttatgcaccc tccaagcggg gggagaagaa ttcggcccag ccagagtgc tgtacctttt 180
tctctctcac acttgaagca aattaaaata gacctaggta aattctcaga tagccctgat 240
ggctatattg atgttttaca aggattagga caatcctttg atctgacatg gagagatata 300
atattactgc taaatcagac gctaacctca aatgagagaa gtgctgccat aactggagcc 360
cgagagtttg gcaatctctg gtatctcagt cagggtcaatg ataggatgac aacggaggaa 420
agagaacgat tccccacagg gcagcaggca gttcccagtg tagctcctca ttggggacaca 480

gaatcagaac atggagattg gtgccgcaga catttaaagc tttccccggg taccga 536

<210> 31

<211> 591

<212> DNA

<213> Artificial Sequence

<220>

<223> Penv-C15 probe

<400> 31

ccatggccat ctacactgaa caagatttat acaatcatgt cgtacctaag cccacaaca	60
aaagagtacc cattcttcct tttgttatca gagcaggagt gctaggcaga ctaggtactg	120
gcattggcag taccacaacc tctactcagt tctactacaa actatctcaa gaaataaatg	180
gtgacatgga acaggctcact gactccctgg tcaccttgca agatcaactt aactccctag	240
cagcagtagt ccttcaaaat cgaagagctt tagacttgct aaccgccaaa agaggggggaa	300
cctgttttatt tttaggagaa gaacgctggt attatgttaa tcaatccaga attgtcactg	360
agaaagttaa agaaattcga gatcgaatac aatgtagagc agaggagctt caaaacaccg	420
aacgctgggg cctcctcagc caatggatgc cctgggttct ccccttctta ggacctctag	480
cagctctaatt attgttactc ctctttggac cctgtatctt taacctcctt gttaagtttg	540
tctcttccag aattgaagct gtaaagctac agatggtctt acaaacttag a	591

<210> 32

<211> 364

<212> DNA

<213> Artificial Sequence

<220>

<223> Ppro-E probe

<400> 32

ctaacctgag gatccagcag caggactgag ggtgcccggg gcaagtgccca gcccatgccca	60
tcacctcag agccccgggt atgtttgacc attgagagcc aggaagttaa ctgtctcctg	120

gacactggcg cagccttctc agtcttactt tcctgtccca gacaattgtc ctccagatct 180
 gtcactatcc gaggggtcct aggacagcca gtcactacat acttctctca gccactaagt 240
 tgtgactggg gaactttact cttttcacat gcttttctaa ttatgcctga aagccccact 300
 cccttggttag ggagagacat tttagcaaaa gcagggggcca ttatacacct gaacaagctt 360
 gaaa 364

<210> 33

<211> 538

<212> PRT

<213> Human

<400> 33

Met Gly Leu Pro Tyr His Ile Phe Leu Cys Ser Val Leu Ser Pro Cys
 1 5 10 15

Phe Thr Leu Thr Ala Pro Pro Pro Cys Arg Cys Met Thr Ser Ser Ser
 20 25 30

Pro His Pro Glu Phe Leu Trp Arg Met Gln Arg Pro Gly Asn Ile Asp
 35 40 45

Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Thr Pro Thr Phe Thr Ala
 50 55 60

His Thr His Met Pro Arg Asn Cys Tyr His Ser Ala Thr Leu Cys Met
 65 70 75 80

His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
 85 90 95

Pro Gly Gly Leu Gly Val Thr Val Cys Trp Thr Tyr Phe Thr Gln Thr
 100 105 110

Gly Met Ser Asp Gly Gly Gly Val Gln Asp Gln Ala Arg Glu Lys His
 115 120 125

Val Lys Glu Val Ile Ser Gln Leu Thr Gly Val His Gly Thr Ser Ser
 130 135 140

Pro Tyr Lys Gly Leu Asp Leu Ser Lys Leu His Glu Thr Leu Arg Thr
 145 150 155 160

His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Gly Leu His
 165 170 175

Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Ile Cys Leu Pro Leu
 180 185 190

Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
 195 200 205

Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
 210 215 220

Ser Asn Val Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Lys Phe
 225 230 235 240

Ser Asn Thr Thr Tyr Thr Thr Asn Ser Gln Cys Ile Arg Trp Val Thr
 245 250 255

Pro Pro Thr Gln Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
 260 265 270

Gly Thr Ser Ala Tyr Arg Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
 275 280 285

Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
 290 295 300

Leu Tyr Ser Tyr Val Ile Ser Lys Pro Arg Asn Lys Arg Val Pro Ile
 305 310 315 320

Leu Pro Phe Val Ile Gly Ala Gly Val Leu Gly Ala Leu Gly Thr Gly
 325 330 335

Ile Gly Gly Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
 340 345 350

Glu Leu Asn Gly Asp Met Glu Arg Val Ala Asp Ser Leu Val Thr Leu
 355 360 365

Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Arg Asn Arg Arg
370 375 380

Ala Leu Asp Leu Leu Thr Ala Glu Arg Gly Gly Thr Cys Leu Phe Leu
385 390 395 400

Gly Glu Glu Cys Cys Tyr Tyr Val Asn Gln Ser Gly Ile Val Thr Glu
405 410 415

Lys Val Glu Glu Ile Pro Asp Arg Ile Gln Arg Ile Ala Glu Glu Leu
420 425 430

Arg Asn Thr Gly Pro Trp Gly Leu Leu Ser Arg Trp Met Pro Trp Ile
435 440 445

Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile Ile Leu Leu Leu Leu Phe
450 455 460

Gly Pro Cys Ile Phe Asp Leu Leu Val Asn Phe Val Ser Ser Arg Ile
465 470 475 480

Glu Ala Val Lys Leu Gln Met Glu Pro Lys Met Gln Ser Lys Thr Lys
485 490 495

Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser Asp Val
500 505 510

Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala Gln Pro
515 520 525

Leu Leu Arg Pro Asn Ser Ala Gly Ser Ser
530 535

<210> 34

<211> 52

<212> PRT

<213> Human

<400> 34

Met Glu Pro Lys Met Gln Ser Lys Thr Lys Ile Tyr Arg Arg Pro Leu
1 5 10 15

Asp Arg Pro Ala Ser Pro Arg Ser Asp Val Asn Asp Ile Lys Gly Thr
20 25 30

Pro Pro Glu Glu Ile Ser Ala Ala Gln Pro Leu Leu Arg Pro Asn Ser
35 40 45

Ala Gly Ser Ser
50

<210> 35

<211> 48

<212> PRT

<213> Human

<400> 35

Met Leu Met Thr Ser Lys Ala Pro Leu Leu Arg Lys Ser Gln Leu His
1 5 10 15

Asn Leu Tyr Tyr Ala Pro Ile Gln Gln Glu Ala Val Arg Ala Val Val
20 25 30

Gly Gln Pro Pro Gln Gln His Leu Gly Phe Pro Val Glu Met Gly Asp
35 40 45

<210> 36

<211> 20

<212> DNA

<213> Human

<400> 36
atccaaagtg gtgagtaata

20

<210> 37

<211> 20

<212> DNA

<213> Human

<400> 37
ctttttttcag atgggaaacg

20

<210> 38

<211> 10

<212> DNA

<213> Human

<400> 38
atccmaagtg

10

<210> 39

<211> 20

<212> DNA

<213> Human

<400> 39
caggaggaaa gtaactaaaa

20

<210> 40

<211> 10

<212> DNA

<213> Human

<400> 40
atgggaaacg

10

<210> 41

<211> 20

<212> DNA

<213> Human

<400> 41
ccatccctag atacatcctg 20

<210> 42

<211> 20

<212> DNA

<213> Human

<400> 42
tctcttccag aatcgaagct 20

<210> 43

<211> 873

<212> DNA

<213> Human

<400> 43
ccctggggcg ggcttccttt ctgggatgag ggcaaaacgc ctggagatac agcaattatc 60
ttgcaactga gagacaggac tagctggatt tcctaggccg actaagaatc cctaagccta 120
gctgggaagg tgaccacgtc cacctttaaa cacggggcctt gcaacttagc tcacacctga 180
ccaatcagag agctcactaa aatgctaatt aggcaaagac aggaggtaaa gaaatagcca 240
atcatctatt gcctgagagc acagcaggag ggacaacaat cgggatataa acccaggcat 300
tcgagctggc aacagcagcc cccctttggg tcccttcctt ttgtatggga gctgttttca 360
tgctatttca ctctattaaa tcttgcaact gcactcttct ggtccatggt tcttacggct 420
cgagctgagc ttttgctcac cgtccaccac tgctgtttgc caccaccgca gacctgccgc 480
tgactcccat ccctctggat cctgcagggt gtccgctgtg ctctgatcc agcgaggcgc 540
ccattgccgc tcccaattgg gctaaaggct tgccattgtt cctgcacggc taagtgcctg 600
ggtttgttct aattgagctg aacactagtc actgggttcc atggttctct tctgtgaccc 660
acggcttcta atagaactat aacacttacc acatggccca agattccatt ccttggaatc 720
cgtgaggcca agaactccag gtcagagaat acgaggcttg ccaccatctt ggaagcggcc 780
tgctaccatc ttggaagtgg ttcaccacca tcttgggagc tctgtgagca aggaccccc 840

ggtaacattt tggcaaccac gaacggacat cca

873

<210> 44

<211> 815

<212> DNA

<213> Human

<400> 44

tcgtcggcca acctcccca cagcacttag gttttcctgt tgagatgggg gactgagaga	60
caggactagc tggatttcct aggctgacta agaatcccta agcctagctg ggaagggtgac	120
cacatccacc tttaaacacg gggcttgcaa cttagctcac acctgaccaa tcagagagct	180
cactaaaatg ctaattagga aaagacagga ggtaaagaaa tagccaatca tctattgcct	240
gagagcacag caggagggac aatgatcggg atataaacc aagtcttcga gccggcaacg	300
gcaaccccct ttgggtcccc tccctttgta tgggagctct gttttcatgc tatttcactc	360
tattaaatct tgcaactgca ctcttctggg ccatgtttct tacggcttga gctgagcttt	420
cgctcgccat ccaccactgc tgtttgccgc caccgcagac ccgccgctga ctcccatccc	480
tctggatcat gcagggtgtc cgctgtgctc ctgatccagc gaggcaccca ttgccgctcc	540
caatcgggct aaaggcttgc cattgttcct gcattggctaa gtgcctgggt tcataccta	600
tgagctgaac actagtcact ggggttccatg gttctcttct gtgaccacaca gcttctaata	660
gagctataac actcaccgca tggcccaagg ttccattcct tgaatccata aggccaagaa	720
ccccagggtc gagaacacga ggcttgccac catcttggga gctctgtgag caaggacccc	780
caagtaacac aaccatgagg gtgcaaatgc atggg	815

<210> 45

<211> 425

<212> DNA

<213> Human

<400> 45

caattcagca ggaagcagtt agagcgggtg tcggccaacc tccccaacag cacttaggtt	60
ttcctgttga gatgggggac tgagagacag gactagctgg atttcctagg ctgactaaga	120

atccttaagc ctaggtggga aggtgaccac atccaccttt aaacacgggg cttgcaactt	180
agctcacacc tgaccaatca gagagctcac taaaatgcta attaggcaaa gacaggaggt	240
aaagaaatag ccaatcattt attgcctgag agcacagcag gagggacaat gatcgggata	300
taaaccaag ttttcgagcc ggcaacggca accccctttg ggtcccctcc ctttgtatgg	360
gagctctggt ttcattgctat ttcactctat taaatcttgc aactgcaaaa aaaaaaaaaa	420
aaaaa	425

<210> 46

<211> 427

<212> DNA

<213> Human

<400> 46	
caattcagca ggaagcagtt agagcggtcg tcggccaacc tccccaacag cacttaggtt	60
ttcctgttga gatgggggac tgagagacag gactagctgg atttcctagg ctgactaaga	120
atccctaagc ctagctggga aggtgaccac atccaccttt aaacacgggg cttgcaactt	180
agttcacacc tgaccaatca gagagctcac taaaatgcta attaggcaaa gacaggaggt	240
aaagaaatag ccaatcatct attgcatgag agcacagcag gagggacaat gatcgggata	300
taaaccaag tcttcgagcc ggcaacggca accccctttg ggtcccctcc ctttgtatgg	360
gagctctggt ttcattgctat ttcactctat taaatcttgc agctgcgaaa aaaaaaaaaa	420
aaaaaaa	427

<210> 47

<211> 600

<212> DNA

<213> Human

<400> 47	
caacaatcgg gatataaacc caggcattcg agctggcaac agcagcccc ctttgggtcc	60
cttccttttg tatgggagct gttttcatgc tatttcactc tattaaatct tgcaactgca	120
ctcttctggt ccatgtttct tacggctcga gctgagcttt tgctcaccgt ccaccactgc	180

tgtttgccac caccgcagac ctgccgctga ctcccatccc tctggatcct gcaggggtgtc	240
cgctgtgctc ctgatccagc gaagcgccca ttgccgctcc caattgggct aaaggcttgc	300
cattgttcct gcacggctaa gtgcctgggt ttgttctaata tgagctgaac actagtcact	360
gggttccatg gttctcttct gtgacccacg gcttctaata gaactataac acttaccaca	420
tggcccaaga ttccattcct tggaatccgt gaggccaaga actccagggtc agagaatacg	480
aagcttgcca ccatcttgga agcggcctgc taccatcttg gaagtgggtc accaccatct	540
tgggagctct gtgagcaagg accccccggt aacatttttg caaccacgaa cggacatcca	600

<210> 48

<211> 530

<212> DNA

<213> Human

<400> 48

atgggagctg ttttcatgct atttcactct attaaatctt gcaactgcac tcttctggtc	60
catgtttctt acggctcgag ctgagctttt gctcacggtc caccactgct gtttgccacc	120
accgcagacc tgccgctgac tcccatccct ctggatcctg caggggtgtcc gctgtgctcc	180
tgatccagcg aagcgcccat tgccgctccc aattgggcta aaggcttgcc attgttcctg	240
cacggctaag tgcctggggt tgttctaatt gagctgaaca ctagtcactg gggtccatgg	300
ttctcttctg tgacccacgg cttctaataa aactataaca cttaccacat ggcccaagat	360
tccattcctt ggaatccgtg aggccaacga actccagggtc agagaatacg aagcttgcca	420
ccatcttgga agcggcctgc taccatcttg gaagtgggtc accaccatct tgggagctct	480
gtgagcaagg accccccggt gacatttttg cgaccaccaa cggacatccc	530

<210> 49

<211> 486

<212> DNA

<213> Human

<220>

<221> misc_feature

<222> (84)..(84)

<223> n = any nucleotide

<220>

<221> misc_feature

<222> (193)..(193)

<223> n = any nucleotide

<220>

<221> misc_feature

<222> (241)..(241)

<223> n = any nucleotide

<400> 49
actgcactct tctgggtccat gtttcttacg gctcgagctg agcttttgct caccgtccac 60
cactgctggt tgccaccacc gcānacctgc cgctgactcc catccctctg gatcctgcag 120
gggtgccgct gtgctcctga tccagcgagg cgccattgc cgctcccaat tgggctaaag 180
gcttgccatt gtncctgcac ggctaagtgc ctgggtttgt tctaattgag ctgaacacta 240
ntcactgggt tccatgggtc tcttctgtga cccacggctt ctaatagaac tataacactt 300
accacatggc ccaagattcc attccttgga atccgtgagg gcaagaactc caggtcagag 360
aatacgaggc ttgccaccat cttggaagcg gcctgctacc atcttggaag tggttcacca 420
ccatcttggg agctctgtga gcaaggaccc cccggtaaca ttttggcaac cacgaacgga 480
catcca 486

<210> 50

<211> 37

<212> PRT

<213> Human

<400> 50

Lys Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser Asp
1 5 10 15

Val Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala Gln
20 25 30

Pro Leu Leu Arg Pro
35

<210> 51

<211> 35

<212> PRT

<213> Human

<400> 51

Met Thr Ser Lys Ala Pro Leu Leu Arg Lys Ser Gln Leu His Asn Leu
1 5 10 15

Tyr Tyr Ala Pro Ile Gln Gln Glu Ala Val Arg Ala Val Val Gly Gln
20 25 30

Pro Pro Gln
35

<210> 52

<211> 33

<212> PRT

<213> Rex PTLV-L

<400> 52

Arg Leu Tyr Asn Thr Leu Ser Leu Asp Ser Pro Pro Ser Pro Pro Lys
1 5 10 15

Glu Leu Pro Ala Pro Ser Arg Phe Ser Pro Pro Gln Pro Leu Leu Arg
20 25 30

Pro

<210> 53

<211> 35

<212> PRT

<213> Tat SIV-AGM

<400> 53

Val	Thr	Tyr	His	Ala	Pro	Arg	Thr	Arg	Arg	Lys	Lys	Ile	Arg	Ser	Leu
1				5					10					15	

Asn	Leu	Ala	Pro	Leu	Gln	His	Gln	Ser	Ile	Ser	Thr	Lys	Trp	Gly	Arg
			20					25					30		

Asp	Gly	Gln
		35